



## MARY

Mary developed from a circulation induced from an upper tropospheric low in the mid-Pacific trough. Tracing back to a position south of Midway Island on 11 July, the system drifted westward to a location halfway between Wake and Ocean Station Victor before aircraft reconnaissance identified it as a tropical storm on the 17th.

With Jean in the South China Sea and Lucy in the Philippine Sea, Mary increased the simultaneous storm count in the western Pacific to three.

Mary began to take a northward course later on the 17th as she rounded the southeastern periphery of a high cell situated north of the western Hawaiian Islands. The small size of Mary, the uncertainty of forward acceleration, coupled with the storm's position being outside the FWC APT coverage area on the 18th shed uncertainty as to her location. However, a valuable and timely piece of information was relayed to Guam by NESS at Suitland, based on the position of Mary on their geostationary ATS-1 satellite picture. With this information a reconnaissance aircraft was vectored toward Mary and found that she had achieved typhoon strength (Figure 5-23 and 5-24).

Remaining at minimal typhoon strength for 24 hours, Mary passed 150 n mi. west of Ocean Station Victor on the 20th and diminished to storm status as she headed northward. By morning of the 21st Mary was beyond the range of reconnaissance aircraft as she accelerated to a rate of 16 kt. By that afternoon satellite data indicated that cooler air had entered the storm as she headed northeast and was becoming extratropical.





TYPHOON MARY  
0600Z 17 JUL TO 1800Z 20 JUL

BEST TRACK						WARNING		24 HOUR FORECAST				48 HOUR FORECAST				72 HOUR FORECAST							
	POSIT		WIND			POSIT		WIND		ERRORS		POSIT		WIND		ERRORS		POSIT		WIND		ERRORS	
170600Z	27.6N	164.8E	40	28.3N	163.6E	45	76	5	30.9N	158.7E	55	134	0	33.7N	157.1E	55	299	-15	---	---	--	--	--
171200Z	28.1N	165.0E	40	28.9N	162.2E	45	148	5	31.4N	158.0E	55	153	-15	34.5N	157.4E	55	245	-10	---	---	--	--	--
171800Z	28.6N	165.1E	40	28.7N	161.5E	45	189	5	31.4N	158.0E	55	120	-25	34.9N	157.5E	55	192	-5	---	---	--	--	--
180000Z	29.0N	165.1E	45	29.3N	165.2E	45	19	0	31.1N	162.2E	50	74	-25	33.5N	160.8E	45	84	-10	---	---	--	--	--
180600Z	29.6N	165.0E	55	29.7N	164.5E	45	27	-10	32.3N	161.3E	50	76	-20	34.8N	161.3E	45	81	-5	---	---	--	--	--
181200Z	30.1N	164.7E	70	30.1N	164.8E	50	5	-20	32.3N	163.2E	50	73	-15	35.0N	162.4E	40	158	-5	---	---	--	--	--
181800Z	30.7N	164.2E	80	30.7N	163.9E	70	15	-10	33.1N	161.9E	65	59	5	36.0N	162.9E	55	192	15	---	---	--	--	--
190000Z	31.4N	163.6E	75	31.2N	163.5E	70	13	-5	33.8N	162.3E	60	99	5	---	---	--	--	--	---	---	--	--	--
190600Z	32.2N	162.8E	70	31.8N	163.2E	65	31	-5	34.5N	162.3E	55	120	5	---	---	--	--	--	---	---	--	--	--
191200Z	33.0N	162.0E	65	33.0N	162.0E	55	0	-10	38.0N	166.3E	25	238	-20	---	---	--	--	--	---	---	--	--	--
191800Z	33.9N	161.2E	60	34.1N	161.3E	50	13	-10	38.5N	167.1E	20	249	-20	---	---	--	--	--	---	---	--	--	--
200000Z	34.9N	160.8E	55	35.0N	160.7E	50	8	-5	---	---	--	--	--	---	---	--	--	--	---	---	--	--	--
200600Z	36.1N	160.8E	50	36.1N	160.8E	40	0	-10	---	---	--	--	--	---	---	--	--	--	---	---	--	--	--
201200Z	37.4N	161.3E	45	36.3N	161.5E	35	72	-10	---	---	--	--	--	---	---	--	--	--	---	---	--	--	--
201800Z	39.1N	161.8E	40	39.3N	162.1E	35	18	-5	---	---	--	--	--	---	---	--	--	--	---	---	--	--	--

TYPHOONS WHILE WIND OVER 35KTS

	WARNING	24-HR	48-HR	72-HR
AVERAGE FORECAST ERROR	42NM	181NM	179NM	0NM
AVERAGE RIGHT ANGLE ERROR	35NM	126NM	108NM	0NM
AVERAGE MAGNITUDE OF WIND ERROR	8KTS	14KTS	9KTS	0KTS
AVERAGE BIAS OF WIND ERROR	-6KTS	-11KTS	-5KTS	0KTS
NUMBER OF FORECASTS	15	11	7	0

ALL FORECASTS

WARNING	24-HR	48-HR	72-HR
42NM	181NM	179NM	0NM
35NM	126NM	108NM	0NM
8KTS	14KTS	9KTS	0KTS
-6KTS	-11KTS	-5KTS	0KTS
15	11	7	0